

WHAT IS CLAIMED IS:

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1. A system for multimedia encryption comprising:
  - a media signal;
  - a data compression module coupled to receive and compress the media signal into a compressed data stream;
  - a data acquisition module coupled to receive and select a set of data from the compressed data stream; and
  - a hashing module coupled to receive and hash the set of data into a keyword.
2. The system of claim 1 wherein the set of data is one frame of data within the compressed data stream.
3. The system of claim 1 wherein the set of data crosses over several frame boundaries within the compressed data stream.
4. The system of claim 1 wherein:
  - the compressed data stream includes compression transform coefficients; and
  - the set of data includes a set of compression transform coefficients.
5. The system of claim 1 wherein:
  - the compressed data stream includes data frames of varying length; and

3 the set of data includes a set of data frames.

1 6. The system of claim 1 wherein:

2 the compressed data stream includes predictive data frames; and

3 the set of data includes a predictive data frame.

1 7. The system of claim 1:

2 wherein the media signal includes a noise signal amplitude;

3 further comprising,

4 an analog to digital converter, having a quantization step size

5 smaller than the noise signal amplitude, coupled to receive and

6 quantize the media signal; and

7 wherein the data compression module compresses the quantized

8 media signal into a compressed data stream.

1 8. The system of claim 1 wherein the data compression module

2 compresses the media signal into one from a group consisting of: MJPEG,

3 MPEG1, MPEG2, or MPEG4, H.261, H.320, and H.323 formats.

1 9. The system of claim 1 further comprising:

2 a pseudo-random number generator coupled to receive and process the

3 keyword in to a set of keywords.

1 10. A method for multimedia encryption, comprising the steps of:  
2 compressing a media signal;  
3 selecting a set of data from the compressed media signal; and  
4 hashing the set of data into a keyword.

1 11. The method of claim 10 wherein:  
2 the compressed media signal includes data frames; and  
3 the selecting step includes the step of selecting one frame of data.

1 12. The method of claim 10 wherein:  
2 the compressed media signal includes data frames and data frame  
3 boundaries; and  
4 the selecting step includes the step of selecting a set of data which  
5 crosses over several data frame boundaries.

1 13. The method of claim 10 wherein:  
2 the compressed media signal includes compression transform  
3 coefficients; and  
4 the selecting step includes the step of selecting a set of compression  
5 transform coefficients.

1 14. The method of claim 10 wherein:

2 the compressed media signal includes data frames of varying length;  
 3 and  
 4 the selecting step includes the step of selecting a set of data frames.

1 15. The method of claim 10 wherein:  
 2 the compressed media signal includes predictive data frames; and  
 3 the selecting step includes the step of selecting a predictive data frame.

1 16. The method of claim 10:  
 2 wherein the media signal includes a noise signal amplitude;  
 3 further comprising the step of quantizing the media signal with a  
 4 quantization step size smaller than the noise signal amplitude; and  
 5 wherein the compressing step includes the step of compressing the  
 6 quantized media signal.

1 17. A system for multimedia encryption, comprising:  
 2 means for compressing a media signal;  
 3 means for selecting a set of data from the compressed media signal; and  
 4 means for hashing the set of data into a keyword.

1 18. The system of claim 17 wherein:  
 2 the compressed media signal includes data frames; and  
 3 the means for selecting includes means for selecting one frame of data.

1 19. The system of claim 17 wherein:  
2 the compressed media signal includes data frames and data frame  
3 boundaries; and  
4 the means for selecting includes means for selecting a set of data which  
5 crosses over several data frame boundaries.

1 20. The system of claim 17 wherein:  
2 the compressed media signal includes compression transform  
3 coefficients; and  
4 the means for selecting includes means for selecting a set of  
5 compression transform coefficients.

1 21. The system of claim 17 wherein:  
2 the compressed media signal includes data frames of varying length;  
3 and  
4 the means for selecting includes means for selecting a set of data  
5 frames.

1 22. The system of claim 17 wherein:  
2 the compressed media signal includes predictive data frames; and  
3 the means for selecting includes means for selecting a predictive data  
4 frame.

1 23. The system of claim 17:  
2 wherein the media signal includes a noise signal amplitude;  
3 further comprising means for quantizing the media signal with a  
4 quantization step size smaller than the noise signal amplitude; and  
5 wherein the means for compressing includes means for compressing  
6 the quantized media signal.

1 24. A computer-useable medium embodying computer program code for  
2 multimedia encryption by executing the steps of:  
3 compressing a media signal;  
4 selecting a set of data from the compressed media signal; and  
5 hashing the set of data into a keyword.

1 25. The computer-useable medium of claim 24 wherein:  
2 the compressed media signal includes data frames; and  
3 the selecting step includes the step of selecting one frame of data.

1 26. The computer-useable medium of claim 24 wherein:  
2 the compressed media signal includes data frames and data frame  
3 boundaries; and  
4 the selecting step includes the step of selecting a set of data which  
5 crosses over several data frame boundaries.

1 27. The computer-useable medium of claim 24 wherein:  
2 the compressed media signal includes compression transform  
3 coefficients; and  
4 the selecting step includes the step of selecting a set of compression  
5 transform coefficients.

1 28. The computer-useable medium of claim 24 wherein:  
2 the compressed media signal includes data frames of varying length;  
3 and  
4 the selecting step includes the step of selecting a set of data frames.

1 29. The computer-useable medium of claim 24 wherein:  
2 the compressed media signal includes predictive data frames; and  
3 the selecting step includes the step of selecting a predictive data frame.

1 30. The computer-useable medium of claim 24:  
2 wherein the media signal includes a noise signal amplitude;  
3 further comprising the step of quantizing the media signal with a  
4 quantization step size smaller than the noise signal amplitude; and  
5 wherein the compressing step includes the step of compressing the  
6 quantized media signal.